



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS
GOVERNOR

November 7, 1988

POST OFFICE BOX 2088
STATE LAND OFFICE BUILDING
SANTA FE, NEW MEXICO 87504
(505) 827-5800

Marbob Energy Corporation
P.O. Drawer 217
Artesia, NM 88210

Attention: Rhonda Nelson

RE: Administrative Order NFL-175

Dear Ms. Nelson:

Reference is made to your application for an Infill Well Finding and Well-Spacing Waiver made pursuant to Section 271.305(b) of the Federal Energy Regulatory Commission regulations, Natural Gas Policy Act of 1978, and the Oil Conservation Division Order No. R-6013 for the following described well:

Holder "CB" Well No. 4 located 2310 feet from the North line and 330 feet from the West line (Unit E) of Section 17, Township 17 South, Range 30 East, NMPM, Eddy County, New Mexico.

THE DIVISION FINDS THAT:

(1) Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well-spacing requirements.

(2) By Division Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) The well for which a finding is sought is to be completed in the Grayburg Jackson Pool, and the standard spacing unit in said pool is 40 acres.

(4) A standard 40-acre oil proration unit comprising the SW/4 NW/4 of Section 17, Township 17 South, Range 30 East, NMPM, is currently dedicated to the Holder "CB" NCT-A Federal Well No. 1 also located in Unit E of said Section 17.

(5) Said unit is not being effectively and efficiently drained by the existing well on the unit.

Administrative Order NFL-175

November 7, 1988

Page No. 2

(6) The drilling and completion of the well for which a finding is sought should result in the production an additional 18,912 MCF of gas from the proration unit which would not otherwise be recovered.

(7) All the requirements of Division Order No. R-6013 have been complied with, and the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

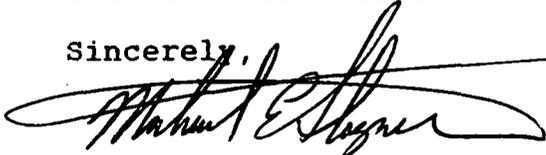
(8) In order to permit effective and efficient drainage of said proration unit, the subject application should be approved as an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED THAT:

(1) The applicant is hereby authorized to complete the Holder "CB" Well No. 4 as described above, as an infill well on the existing 40-acre oil proration unit comprising the SW/4 NW/4 (Unit E) of Section 17, Township 17 South, Range 30 East, NMPM, Grayburg Jackson Pool, Lea County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,



Michael E. Stogner
Examiner

MES/ag

cc: Oil Conservation Division - Artesia
US Bureau of Land Management - Roswell
NM Oil and Gas Engineering Committee - Hobbs

Received 2/29/88
Release Now
M.S.

Marbob Energy Corporation
~~Holder~~" P.O. Drawer 217
Artesia, NM 88210

Attention: Ronda Nelson

RE: Administrative Order NFL-173

Dear Ms. Nelson:

Reference is made to your application for an Infill Well Finding and Well-Spacing Waiver made pursuant to Section 271.305(b) of the Federal Energy Regulatory Commission regulations, Natural Gas Policy Act of 1978, and the Oil Conservation Division Order No. R-6013 for the following described well:

Holder "CB" Well No. 4 located 2310 feet
from the North line and 330 feet from the West line of
(Unit E)

Section 17, Township 17 South, Range 30 East, NMPM,
Eddy County, New Mexico.

THE DIVISION FINDS THAT:

(1) Section 271.305(b) of the Federal Energy Regulatory Commission Interim Regulations promulgated pursuant to the Natural Gas Policy Act of 1978 provides that, in order for an infill well to qualify as a new onshore production well under Section 103 of said Act, the Division must find, prior to the commencement of drilling, that the well is necessary to effectively and efficiently drain a portion of the reservoir covered by the proration unit which cannot be so drained by any existing well within that unit, and must grant a waiver of existing well-spacing requirements.

(2) By Division Order No. R-6013, dated June 7, 1979, the Division established an administrative procedure whereby the Division Director and the Division Examiners are empowered to act for the Division and find that an infill well is necessary.

(3) The well for which a finding is sought is to be completed in the Grayburg Jackson Pool, and the standard spacing unit in said pool is 40 acres.

(4) A ~~AAA~~ standard 40-acre (gas) (oil) proration unit comprising the SW¹/₄ NW¹/₄ of Section 17, Township 17 South, Range 30 East, is currently dedicated to the Holder "CB" NCT-A ^{Federal} Well No. 1 _{also} located in Unit E of said Section 17.

Said non-standard unit was previously approved by Order No. _____.

Said unit is not being effectively and efficiently drained by the existing (well) (wells) on the unit.

The drilling and completion of the well for which a finding is sought should result in the production of an additional 18,912 MCF of gas from the proration unit which would not otherwise be recovered.

All the requirements of Division Order No. R-6013 have been complied with, and the well for which a finding is sought is necessary to effectively and efficiently drain a portion of the reservoir covered by said proration unit which cannot be so drained by any existing well within the unit.

In order to permit effective and efficient drainage of said proration unit, the subject application should be approved as

an exception to the standard well spacing requirements for the pool.

IT IS THEREFORE ORDERED THAT:

(1) The applicant is hereby authorized to drill the Holder "CB" Well No. 4 as described above, as an infill well on the existing 40-acre (oil) (gas) proration unit comprising the SW¹/₄ NW¹/₄ (Unit E) of Section 17, Township 17 South, Range 30 East, NMPM, Grayburg Jackson Pool, Eddy County, New Mexico. The authorization for infill drilling granted by this order is an exception to applicable well spacing requirements and is necessary to permit the drainage of a portion of the reservoir covered by said proration unit which cannot be effectively and efficiently drained by any existing well thereon.

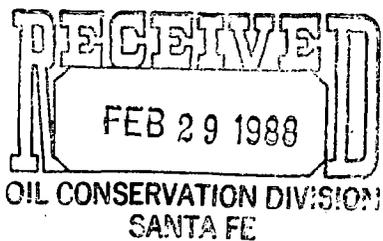
(2) Jurisdiction of this cause is retained for the entry of such further orders as the Division may deem necessary.

Sincerely,

Michael E. Stogner

Examiner

cc: Oil Conservation Division - Artesia
USBLM - Roswell
NMOCGEC - Hobbs



Request for Infill Finding on

Holder "CB" #4

in accordance with Administrative

Procedures amended February 8, 1980

Ronda

Anthony Nelson

748-3303

**UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY**

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. TYPE OF WORK
 DRILL DEEPEN PLUG BACK

b. TYPE OF WELL
 OIL WELL GAS WELL OTHER SINGLE ZONE MULTIPLE ZONE

2. NAME OF OPERATOR
 Marbob Energy Corporation

3. ADDRESS OF OPERATOR
 P.O. Drawer 217, Artesia, NM 88210

4. LOCATION OF WELL (Report location clearly and in accordance with any State requirements.)*
 At surface
 2310 FNL 330 FWL
 At proposed prod. zone
 same

14. DISTANCE IN MILES AND DIRECTION FROM NEAREST TOWN OR POST OFFICE*
 22 air miles east of Artesia, New Mexico

10. DISTANCE FROM PROPOSED* LOCATION TO NEAREST PROPERTY OR LEASE LINE, FT. (Also to nearest drig. unit line, if any) 330'

18. DISTANCE FROM PROPOSED LOCATION* TO NEAREST WELL, DRILLING, COMPLETED, OR APPLIED FOR, ON THIS LEASE, FT. 470.5'

10. NO. OF ACRES IN LEASE 160

19. PROPOSED DEPTH 5000'

17. NO. OF ACRES ASSIGNED TO THIS WELL 40

20. ROTARY OR CABLE TOOLS Rotary

21. ELEVATIONS (Show whether DF, RT, GR, etc.) 3646.0'

22. APPROX. DATE WORK WILL START* 11/26/87

5. LEASE DESIGNATION AND SERIAL NO.
 LC-056551(A)

6. IF INDIAN, ALLOTTEE OR TRIBE NAME

7. UNIT AGREEMENT NAME

8. FARM OR LEASE NAME
 Holder "CB"

9. WELL NO.
 4

10. FIELD AND POOL, OR WILDCAT
 Grayburg Jackson

11. SEC., T., E., M., OR BLK. AND SURVEY OR AREA
 Sec. 17-T17S-R30E

12. COUNTY OR PARISH Eddy **13. STATE** NM

23. PROPOSED CASING AND CEMENTING PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	QUANTITY OF CEMENT
12 1/4"	8 5/8"	24#	450'	Sufficient to circulate
7 7/8"	5 1/2"	17#	5000'	1500 sx to base of salt.

Pay zone will be selectively perforated and stimulated as needed for optimum production.

- Attached are: 1. Location & acreage dedication plat
 2. Supplemental drilling data
 3. Surface use plan

APPROVAL OF THIS APPLICATION DOES NOT WARRANT OR CERTIFY THAT THE APPLICANT HOLDS LEGAL OR MARKETABLE TITLE TO THOSE RIGHTS IN THE SUBJECT LEASE WHICH WOULD ENTITLE THE APPLICANT TO CONDUCT OPERATIONS THEREON.

RECEIVED
 NOV 5 10 58 AM '87
 CARLSBAD RESOURCE AREA HEADQUARTERS

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: If proposal is to deepen or plug back, give data on present productive zone and proposed new productive zone. If proposal is to drill or deepen directionally, give pertinent data on subsurface locations and measured and true vertical depths. Give blowout preventer program, if any.

24. SIGNED Rhonda Nelson TITLE Production Clerk DATE 11/3/87

(This space for Federal or State office use)

PERMIT NO. _____ APPROVAL DATE _____
 APPROVED BY Richard E. Mannes TITLE AREA MANAGER CARLSBAD RESOURCE AREA DATE 11-10-87
 CONDITIONS OF APPROVAL, IF ANY:

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Supersedes C-128
 Effective 1-1-65

All distances must be from the outer boundaries of the Section

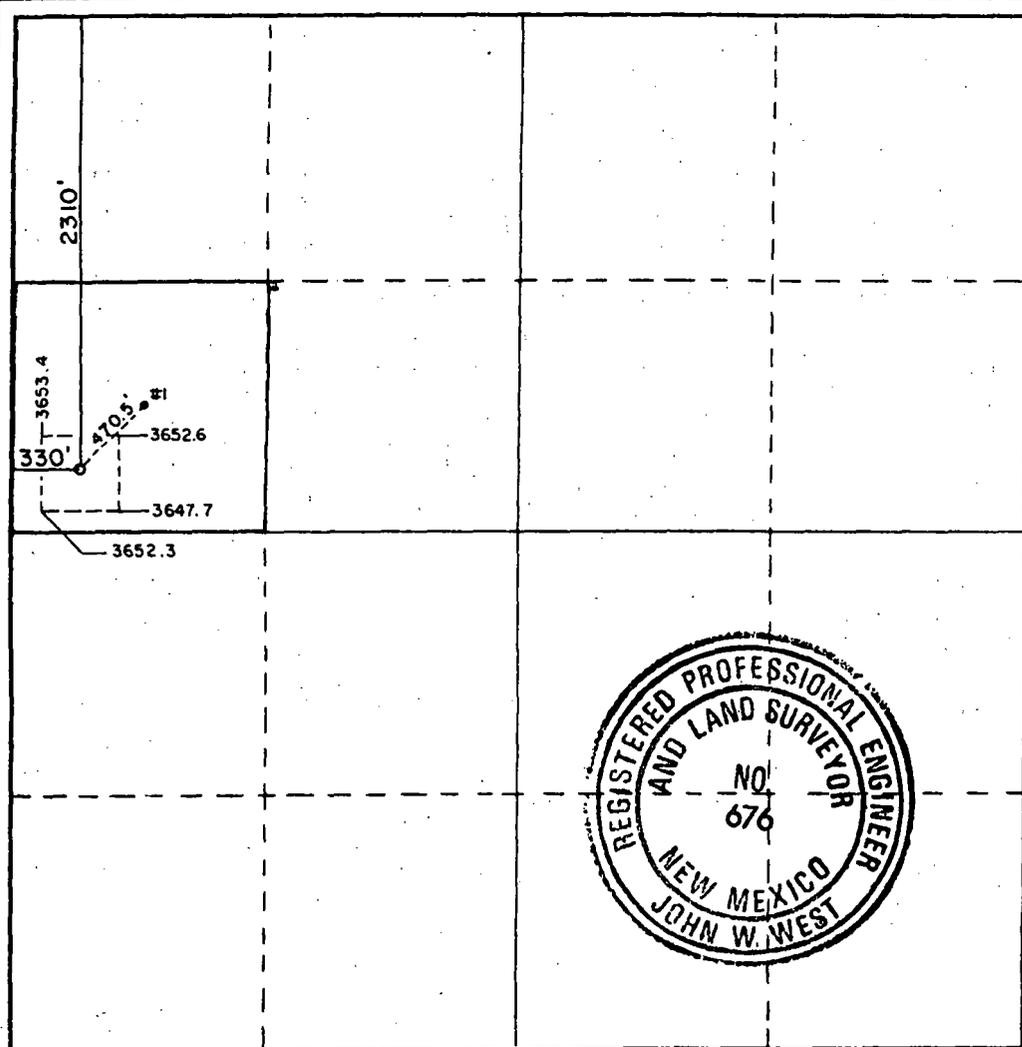
Operator Marbob Energy Corp.		Lease Holder CB		Well No. 4
Unit Letter E	Section 17	Township 17-S	Range 30-E	County Eddy
Actual Footage Location of Well: 2310 feet from the North line and 330 feet from the West line				
Ground Level Elev. 3646.0	Producing Formation San Andres	Pool Grayburg Jackson	Dedicated Acreage: 40 Acres	

1. Outline the acreage dedicated to the subject well by colored pencil or hachure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interests of all owners been consolidated by communitization, unitization, force-pooling, etc?

Yes No If answer is "yes," type of consolidation _____

If answer is "no," list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interests, has been approved by the Commission.



CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Rhonda Nelson

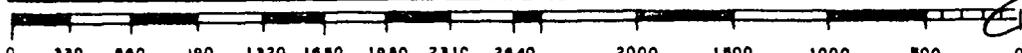
Name Rhonda Nelson
Position Production Clerk
Company Marbob Energy Corporation
Date November 3, 1987

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed October 24, 1987
Registered Professional Engineer and/or Land Surveyor <i>John W. West</i>

Certificate No. **JOHN W. WEST, 676**
RONALD J. EIDSON, 3239

96560



Rule 6:

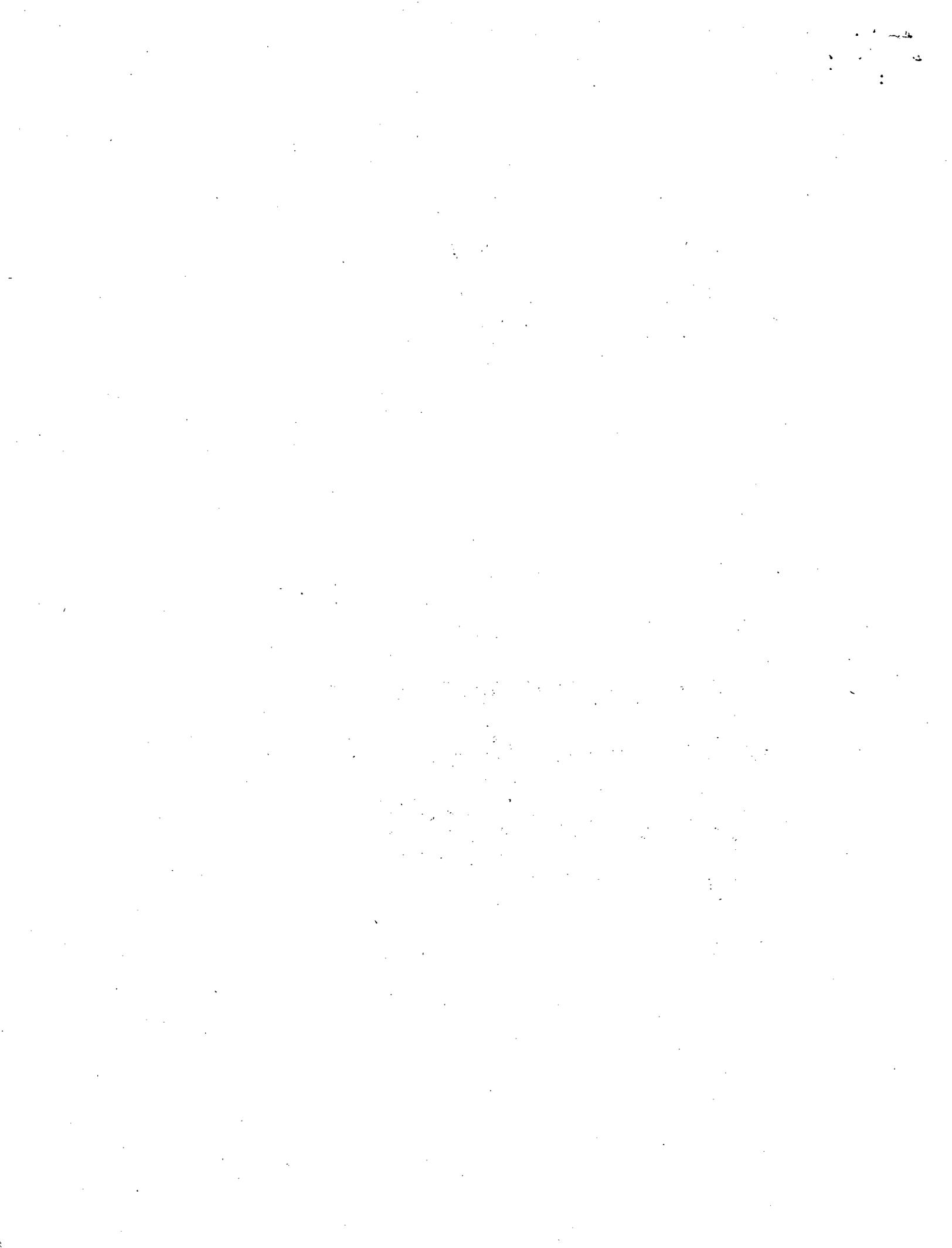
Holder "CB" #4

Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres

Standard spacing unit: 40 acres

Rule 7:

NA



Paul G. White Engineering

OIL AND NATURAL GAS

FEB 16 1988

February 15, 1988

Marbob Energy Corporation
P.O. Box 217
Artesia, New Mexico 88210

Re: Pertinent Engineering Date
Holder "CB" No. 4
Grayburg Jackson - SR-Q-G-SA
Eddy County, New Mexico

Gentlemen:

The subject well, located 2310 FNL and 330 FWL, Section 17-17S-30E, Eddy County, New Mexico, was completed May 23, 1986.

I have estimated the oil and gas reserves for the subject well based on a 10 acre density. From the electrical log and analagous well studies, I have estimated that the well will recover 26,090 barrels of oil and 18,912 MCF of gas.

This well exhibits a starting rate which indicates an undisturbed reservoir even when drilled on the 10 acre proration unit. Further, the very low order of permeability requires very large fracture treatments and stimulations for a well to respond and produce any hydrocarbons. None are produced naturally. Thirdly, there has been no evidence of any drainage or communication between the wells when drilled and developed on the 10 acre density.

A study of nearby producing well rates and initial potentials reveals that wells will have to be drilled on a 10 acre spacing to properly and adequately recover the oil and gas reserves in this field.

Therefore, it is my recommendation that in-fill wells be drilled and the well density be increased to at least 10 acre spacing.

From my study the in-fill wells will characteristically exhibit new reservoir conditions.

Signed

Paul G. White
Paul G. White, Petroleum Engineer

Date

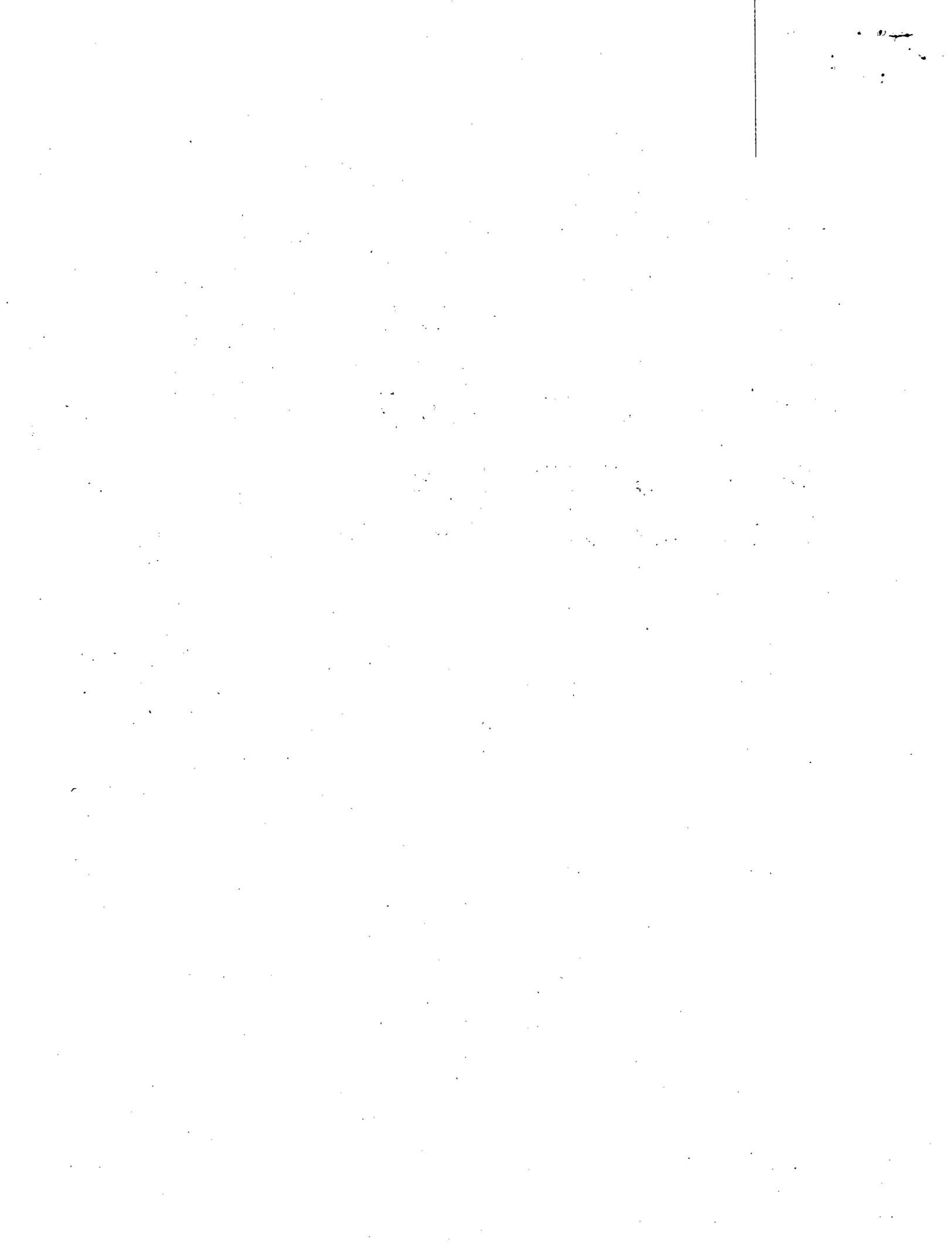
Feb 15, 1988

Rule 8:

- a. Holder "CB" Federal #1 - 1980 FNL 660 FWL Sec. 17-T17S-R30E
Holder "CB" Federal #4 - 2310 FNL 330 FWL Sec. 17-T17S-R30E
- b. #1 - 8/4/72
#4 - 11/30/87
- c. #1 - 9/1/72
#4 - 12/1/87
- d. None
- e. #1 - 6 bbl. oil, 29 mcf gas/day
#4 - 40 bbl. oil, 80 mcf gas/day
- f. NA
- g. The Holder "CB" #4 was drilled because of the low permeability and low quality solution gas recovery mechanism require reduced spacing to effeciently drain the reservoir. Since both #1 and #4 experienced new reservoir type conditions we feel the additional drilling was justified.

Rule 11:

Notice of this infill finding has been sent to the following offset operators: Burnett Oil Co., 1500 Interfirst Tower, 801 Cherry St., Ft. Worth, Texas 76102; Anadarko Exploration Co., P.O. Box 2497, Midland, Texas 79702; and Phillips 66 Natural Gas Co., 4001 Penbrook, Odessa, Texas 79762.



Request for Infill Finding on

Holder "CB" #4

*in accordance with Administrative
Procedures amended February 8, 1980*

MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT

Form C-102
 Supersedes C-128
 Effective 1-1-65

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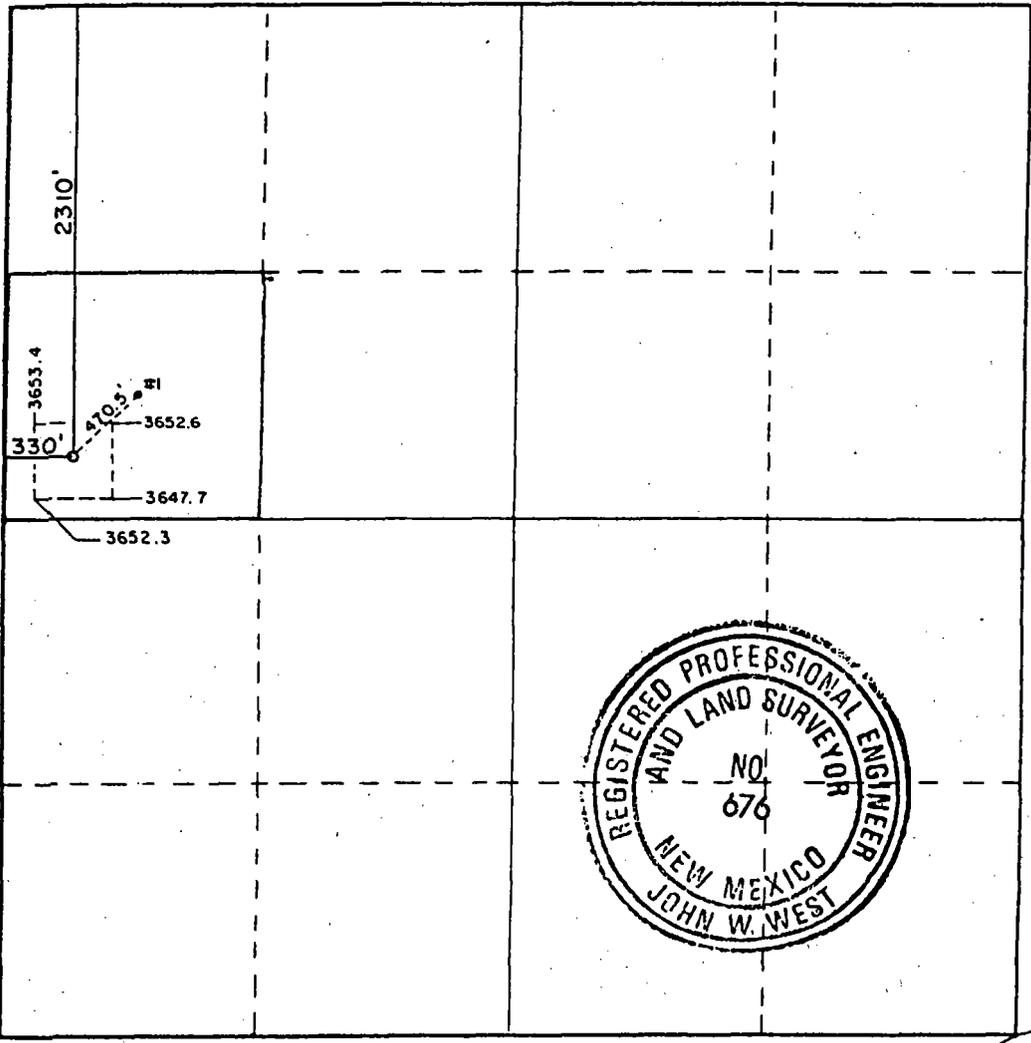
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CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Rhonda Nelson
 Name

Rhonda Nelson

Position
 Production Clerk

Company
 Marbob Energy Corporation

Date
 November 3, 1987

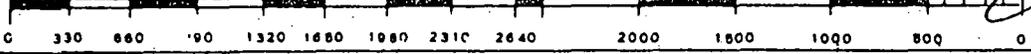
I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed
 October 24, 1987

Registered Professional Engineer and/or Land Surveyor

John W. West

Certificate No. JOHN W. WEST, 676
 RONALD J. EIDSON, 3239



Rule 6:

Holder "CB" #4

Pool: Grayburg Jackson Seven Rivers Queen Grayburg San Andres

Standard spacing unit: 40 acres

Rule 7:

NA

Paul G. White Engineering

OIL AND NATURAL GAS

February 15, 1988

Marbob Energy Corporation
P.O. Box 217
Artesia, New Mexico 88210

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Holder "CB" No. 4
Grayburg Jackson - SR-Q-G-SA
Eddy County, New Mexico

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Therefore, it is my recommendation that in-fill wells be drilled and the well density be increased to at least 10 acre spacing.

From my study the in-fill wells will characteristically exhibit new reservoir conditions.

Signed Paul G. White
Paul G. White, Petroleum Engineer

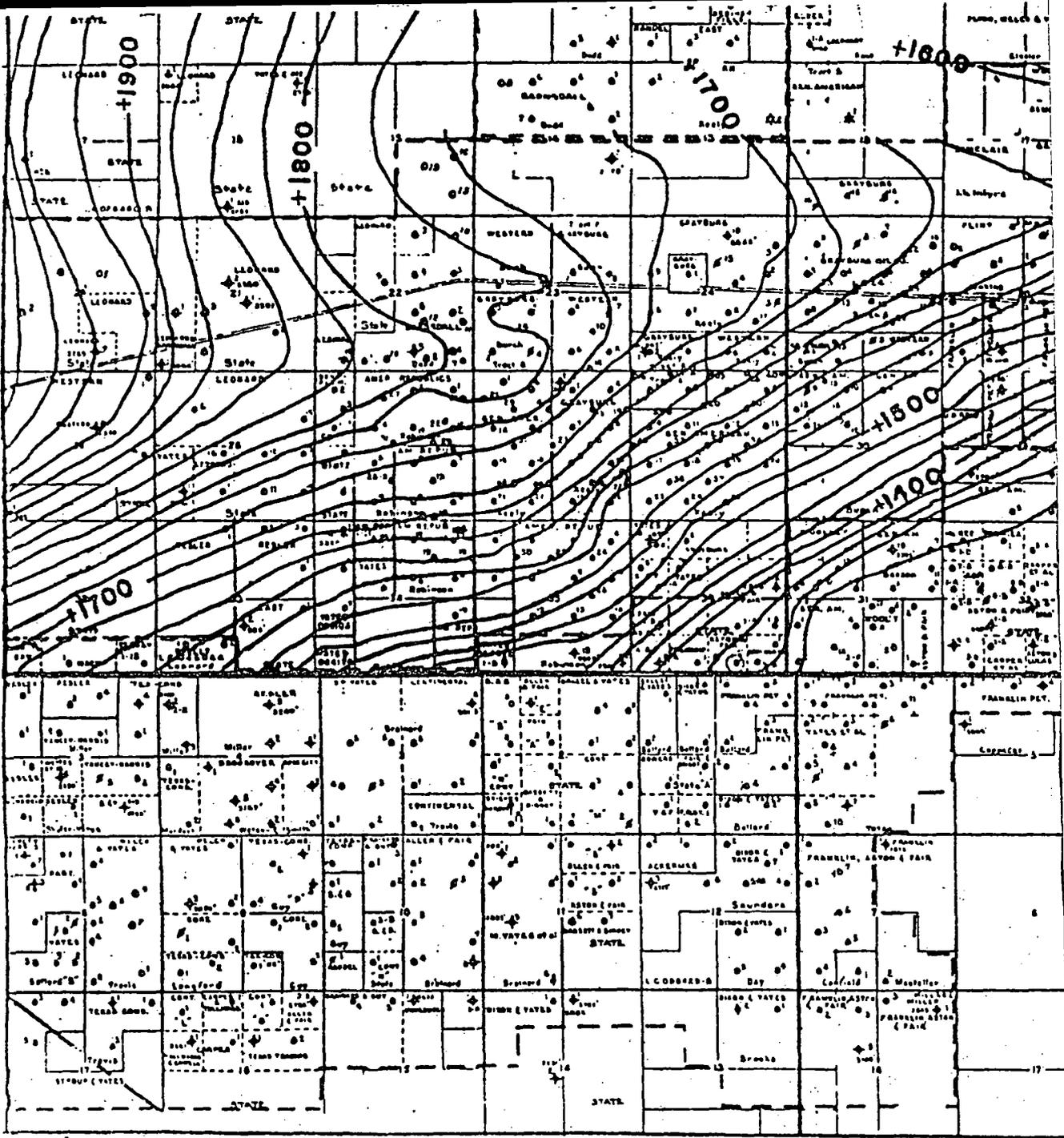
Date Feb 15, 1988

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Holder "CB" Federal #4 - 2310 FNL 330 FWL Sec. 17-T17S-R30E
- b. #1 - 8/4/72
#4 - 11/30/87
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#4 - 12/1/87
- d. None
- e. #1 - 6 bbl. oil, 29 mcf gas/day
#4 - 40 bbl. oil, 80 mcf gas/day
- f. NA
- g. The Holder "CB" #4 was drilled because of the low permeability and low quality solution gas recovery mechanism require reduced spacing to effeciently drain the reservoir. Since both #1 and #4 experienced new reservoir type conditions we feel the additional drilling was justified.

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R 29 E

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